



Profile of Vegetable Growers in Sto. Nino, Cagayan: An Assessment

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Abstract

The study was conducted at Sto.Nino, Cagayan, Philippines from June to July 2023 to assess the profile and problems encountered by the vegetable growers. Descriptive research was adopted in the study. The researcher used the questionnaire as the main instrument in data gathering. The socio-demographic profile of vegetable grower respondents reveals a predominantly male, middle-aged, married population with a strong cultural identity and significant organizational involvement. The socio-economic characteristics of the vegetable grower respondents reveal a dedicated and primarily self-sufficient agricultural community. Result also reveals that a community of vegetable growers that relies heavily on local resources and traditional practices. The community of vegetable growers who face significant challenges in marketing, production costs, and environmental risks. While there is a sense of capital sufficiency among many respondents, the reliance on intermediaries for sales and the vulnerability to climate-related damage are concerning. The findings suggest a need for improved market access, better pricing strategies, and enhanced support for risk management to bolster the sustainability and profitability of vegetable production in this community.

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Introduction

The profile of vegetable growers in Sto. Niño, Cagayan, is a vital aspect of understanding the agricultural landscape of the region. Cagayan, located in the northeastern part of Luzon, Philippines, is known for its rich agricultural resources and diverse farming practices. The municipality of Sto. Niño has emerged as a significant contributor to the local vegetable supply, driven by both traditional farming methods and modern agricultural techniques. This introduction aims to provide an overview of the demographic, economic, and social characteristics of vegetable growers in this area, highlighting their contributions to the local economy and food security. Demographically, vegetable growers in Sto. Niño exhibit a diverse profile, encompassing various age groups, educational backgrounds, and farming experiences. Many growers are smallholder farmers, often managing less than a hectare of land, which reflects the common agricultural practice in rural Philippine communities.

According to the Philippine Statistics Authority (PSA), smallholder farmers play a crucial role in the country's agricultural sector, contributing significantly to food production and rural employment (PSA, 2021). Understanding the demographic characteristics of these growers is essential for developing targeted support programs and policies that can enhance their productivity and livelihoods.

Economically, vegetable farming in Sto. Niño serves as a primary source of income for many families. The cultivation of various vegetables, such as tomatoes, eggplants, and leafy greens, not only meets local demand but also provides opportunities for market expansion. The local government has implemented initiatives to support farmers through access to credit, training programs, and market linkages, which are crucial for improving their economic viability (Department of Agriculture, 2022). These economic factors underscore the importance of vegetable growing as a sustainable livelihood option for the residents of Sto. Niño.

Socially, the community of vegetable growers in Sto. Niño is characterized by strong social networks and cooperative practices. Farmers often engage in collective activities, such as sharing resources, knowledge, and labor, which fosters a sense of community and mutual support. Research indicates that social capital plays a significant role in enhancing agricultural productivity and resilience among smallholder farmers (Putnam, 2000).

The collaborative spirit among vegetable growers not only strengthens their farming practices but also contributes to the overall social fabric of the community.

These profile of vegetable growers in Sto. Niño, Cagayan, reflects a complex interplay of demographic, economic, and social factors that shape their agricultural practices and livelihoods. Understanding these dynamics is essential for stakeholders, including policymakers, agricultural extension workers, and researchers, to develop effective strategies that support the growth and sustainability of vegetable farming in the region. By recognizing the contributions of these growers, we can better appreciate their role in ensuring food security and promoting rural development in the Philippines.

Research methods

This chapter presents the methodology in the conduct of the study. It includes the research design, respondents of the study, data gathering procedure and statistical tools.

Research design

This study utilized the descriptive research design. The design describes the profile of the vegetable growers in Sto. Niño, Cagayan.

Locale of the study

The study was conducted in the Barangays of Centro Norte, Centro Sur, Namuccayan, and Matalao for the month of June to July 2023 at Sto. Niño, Cagayan Valley.

Respondents and sampling procedures

Respondents of the study were the community residents. Fifty (50) respondents were picked at random from the list of the vegetable growers in the area.

Data gathering instruments

The main data gathering tool was the questionnaire. The questionnaire was pre-tested and validated before it was finally administered to the respondents. The survey included questions about economic activities related to agriculture, agricultural practices, services received, marketing strategies, sources of financing for vegetable production, savings, investments, and any problems encountered. A face-to-face interview was likewise conducted to implement the responses given in the questionnaire.

Data gathering procedures

Before the conduct of the study, a permission letter endorsed by the Campus Extension Office was sought

from the Office of the Municipal Agriculturist and Barangay Captains of the barangays surveyed where the respondents reside. After the permission was approved, the researchers personally administered the questionnaire to ensure 100% retrieval.

Data analysis

The data were analyzed and tabulated using the frequency counts and percentages in the socio-demographic and socio-economic profiles. The ranking was also used in determining the problems encountered by the respondents.

Discussion of results

Table 1 detailing the socio-demographic status of vegetable grower respondents provides a comprehensive overview of the characteristics of the sample population. The respondents are predominantly male, with 58% (29 individuals) identifying as male and 42% (21 individuals) as female.

Table 1. Socio-Demographic Status of Vegetable Grower Respondents.

Characteristics	Frequency	Percent
Sex		
Male	29	58.0
Female	21	42.0
Total	50	100.0
Age		
20-30	1	2.0
31-40	8	16.0
41-50	15	30.0
51-60	15	30.0
Above 60	11	22.0
Total	50	100.0
Mean		51.32
SD		10.22
Civil Status		
Married	44	88.0
Single	3	6.0
Widow/Widower	2	4.0
Separated	1	2.0
Total	50	100.0
Religion		
Roman Catholic	45	90.0
Jehovah's Witnesses	0	0
Born Again Christian	4	8.0
United Church of Christ in the Philippines	0	0

Iglesia ti Dios	0	0
Iglesia ni Cristo	0	0
United Church of Christ	0	0
Pentecost	0	0
Muslim	1	2.0
Total	50	100.0
Ethnicity		
Ilocano	47	94.0
Igorot	0	0
Tagalog	3	6.0
Ybanag	0	0
Total	50	100.0
Highest Educational Attainment		
Some Elementary	3	6.0
Elementary Graduate	8	16.0
Some High School	4	8.0
High School Graduate	13	26.0
Vocational	1	2.0
Some College	9	18.0
College Graduate	12	24.0
Total	50	100.0
Type of Family		
Nuclear	43	86.0
Extended	7	14.0
Total	50	100.0
Group (*Multiple Response)		
Senior Citizen	13	26.0
Indigenous People (IP)	0	0
None of the above	37	72.0
Total	50	100.0
Membership in Organization		
Yes	45	90.0
No	5	10.0
Total	50	100.0

This indicates a significant male representation in vegetable growing within this sample. The age of respondents varies, with the majority falling within the 41-60 age range (30% each for ages 41-50 and 51-60). The mean age of the respondents is 51.32 years, with a standard deviation of 10.22, suggesting a mature demographic that may have substantial experience in vegetable growing. A large majority of the respondents are married (88%), which may reflect stability in their personal lives that could contribute to their agricultural activities. Only a small percentage are single (6%), widowed (4%), or separated (2%). The respondents are predominantly Roman Catholic (90%), with a small representation of Born-Again Christians (8%) and one Muslim

respondent (2%). This religious homogeneity may influence community practices and support systems in agricultural activities. Many respondents identify as Ilocano (94%), with a small number identifying as Tagalog (6%). This suggests a strong cultural identity among the respondents, which may impact their agricultural practices and community interactions. The educational background of the respondents shows a diverse range, with 24% being college graduates and 26% having completed high school. However, there is also a notable percentage (6%) with only some elementary education. This variation in educational attainment may influence their farming techniques and access to agricultural resources. Most respondents come from nuclear families (86%),

indicating a preference for smaller family units, which may affect labor dynamics in vegetable farming. A notable 26% of respondents are classified as senior citizens, which may have implications for labor availability and the transfer of knowledge to younger

generations. A significant majority (90%) of respondents are members of organizations, which could provide them with support networks, resources, and shared knowledge that enhance their farming practices.

Table 2. Socio-Economic Characteristics and Other Economic Activities Related to Agriculture.

Characteristics	Frequency	Percent
Registration in the RSBSA or Registry System for Basic Sectors in Agriculture		
Yes	50	100.0
No	0	0
Total	50	100.0
Availment in Crop Insurance		
Yes	13	26.0
No	37	74.0
Total	50	100.0
Respondents as to whether they are beneficiaries of "Pantawid Pamilyang Pilipino Program" or 4Ps		
Yes	4	8.0
No	46	92.0
Total	50	100.0
Main source of income		
Farming	50	100.0
Farm Labor	0	0
Poultry/Livestock Raising	0	0
Fishing	0	0
Total	50	100.0
Tenurial status (*Multiple Response)		
Owner	32	64.0
Tenant	18	36.0
Leaseholder	0	0
Sharecropper	0	0
Total	50	100.0
Crops/commodities most grown by respondents (*Multiple Response).		
Rice	35	70.0
Corn	28	56.0
Vegetable	50	100.0
Root crops	2	96.0
Fruits	0	0
Total	115	
The respondents' responses regarding the commodities they usually grow(*Multiple Response).		
Sitao	42	84.0
Talong	35	70.0
Okra	29	58.0
Ampalaya	34	68.0
Kamatis	33	66.0
Siling panigang	28	44.0
Repolyo	30	40.0
Pechay	16	32.0
Patola	23	46.0
Kalabasa	26	52.0
Sigarilyas	8	16.0

Upo	3	6.0
Sibuyas	1	2.0
Beans	1	2.0
Total	309	
Number of years in vegetable growing		
Less than 5 years	8	16.0
5 to 10 years	16	32.0
11 to 20 years	10	20.0
21 to 30	7	14.0
31 to 40	3	6.0
41 to 50	5	10.0
51 years and above	1	2.0
Total	50	100.0
Mean		17.96
SD		15.24
Number of cropping season per year		
Once per year	7	14.0
Twice per year	9	18.0
Thrice per year	4	8.0
All year round	30	60.0
Total	50	100.0
Land area cultivated by vegetable growers (in hectare)		
0.001-1.000	46	92.0
1.001-2.000	4	8.0
2.001-3.000	0	0
3.001-4.000	0	0
4.001-5.000	0	0
Total	50	100.0
Mean		0.51
SD		0.81

This means that the socio-demographic profile of vegetable grower respondents reveals a predominantly male, middle-aged, married population with a strong cultural identity and significant organizational involvement. These factors may play a crucial role in shaping their agricultural practices and community engagement.

Table 2 reflects the socio-economic characteristics and other economic activities related to agriculture provides valuable insights into the profile of the respondents involved in vegetable growing. All respondents (100%) are registered in the Registry System for Basic Sectors in Agriculture (RSBSA). This indicates a strong compliance with agricultural registration, which may facilitate access to government programs and resources. A minority of respondents (26%) avail themselves of crop insurance, while 74% do not. This suggests a potential

gap in risk management practices among the growers, as crop insurance can provide financial protection against losses due to adverse weather or other unforeseen events. Only 8% of respondents are beneficiaries of the 4Ps, a government program aimed at providing financial assistance to low-income families. The low participation rate may indicate limited access to social welfare programs or a lack of awareness about such initiatives. All respondents (100%) identify farming as their primary source of income, highlighting the central role of agriculture in their livelihoods. There is no indication of diversification into other income-generating activities such as farm labor, poultry/livestock raising, or fishing. Many respondents are landowners (64%), while 36% are tenants. This distribution suggests a relatively stable land tenure situation, which can influence investment in agricultural practices and long-term planning. All respondents grow vegetables,

with rice (70%) and corn (56%) also being significant crops. This indicates a diverse agricultural practice, although the focus on vegetables suggests a specialization that may cater to market demands. The respondents grow a variety of vegetables, with Sitao (84%), Talong (70%), and Ampalaya (68%) being the most common. This diversity in vegetable production may enhance food security and provide varied income sources. The experience of respondents in vegetable growing varies, with 32% having 5 to 10 years of experience. The mean experience is approximately 18

years, indicating that many respondents possess substantial knowledge and skills in vegetable cultivation. A significant majority (60%) of respondents practice all-year-round cropping, which suggests an intensive farming approach that maximizes productivity and income potential. Most respondents (92%) cultivate less than 1 hectare of land, with a mean land area of 0.51 hectares. This small-scale farming may limit the scale of production but can also indicate a focus on intensive cultivation practices.

Table 3. Agricultural Activities and Services Received.

Agricultural Activities and Services Received	Frequency	Percent
Source of agricultural services information (*Multiple Response).		
Barangay officials and employees	29	58.0
NGO, Association, or Cooperative	6	12.0
Municipal Agriculturist	29	58.0
DA officials	23	46.0
Private enterprise/agent	10	20.0
TV/Radio/Social Media	15	30.0
Total	112	
Type of services received		
Seeds	45	90.0
Fertilizers	45	90.0
Biological control agents	8	16.0
Botanical Pesticides	0	0
Construction of farm production facilities	12	24.0
Technology demonstrations	3	6.0
Information, education, and communication (IEC) materials	10	20.0
Postharvest equipment and machinery	9	18.0
Establishment of small-scale irrigation projects	2	4.0
Total	134	
Respondents as to whether they availed training?		
Yes	26	52.0
No	24	48.0
Total	50	100.0
The Source of respondents' planting materials(*Multiple Response).		
Own supply of crops/seeds/seedlings	18	36.0
Vendors/Suppliers	34	68.0
Government in general	6	12.0
Local government	4	8.0

Department of Agriculture	23	46.0
Other National Government	1	2.0
Universities	3	6.0
NGOs	6	12.0
Cooperatives	4	8.0
Others-Online shop	2	4.0
Total	101	
Vegetable Varieties Grown		
Hybrid	26	52.0
Both Hybrid and Open Pollinated Variety (OPV)	21	42.0
Open Pollinated Variety (OPV)	3	6.0
Total	50	100.0
Nature of Vegetable Farm		
Irrigated	22	44.0
Rainfed lowland	26	52.0
Rainfed upland	2	4.0
Total	50	100.0
Source of Irrigation		
Private individual/group	21	95.5
National Irrigation Administration	1	4.5
Total	22	100.0
Used in Farm Operation (*Multiple Response).		
Carabaos/Farm animals	45	90.0
Disc Harrow	9	18.0
Garden Tools (rake, shovel, trowel)	32	64.0
Mechanized machinery/Tractors	15	30.0
Rotavator	10	20.0
Total	111	
Respondents' as to whether they are aware on Good Agricultural Practices (GAP).		
Yes	30	60.0
No	20	40.0
Total	50	100.0
Respondents' as to whether they are GAP (Good Agricultural Practices) practitioners.		
Yes	10	33.3
No	20	66.7
Total	30	100.0
Fertilizer Used		
Both organic and inorganic fertilizer	31	62.0
Inorganic fertilizer	15	30.0
Organic fertilizer	4	8.0
Total	50	100.0
Pesticide Used		
Commercial/Synthetic Pesticides	24	48.0

Both Botanical and Commercial/Synthetic Pesticides	16	32.0
Botanical Pesticides	10	20.0
Total	50	100.0
Source of Fertilizer and Pesticide Guide/Assistance(*Multiple Response).		
Knowledge from experience or what you normally do	30	60.0
Advice/recommendations from fellow farmers or neighbors	16	32.0
Money at hand that can be used to buy fertilizers and pesticides	1	2.0
Technical advice from experts	6	18.0
Directions for use indicated on container/packaging	37	74.0
Soil analysis	2	4.0
Information for crop sensors	0	0
Total	92	
Tools/equipment used in fertilizer and pesticide application(*Multiple Response).		
Hand-held/portable sprayers/applicators	42	84.0
No tool, equipment, or technology	4	8.0
Mechanized sprayers/applicators	16	32.0
Total	62	
Weeding practices		
Manual	47	94.0
Use of garden tools	17	34.0
Use of equipment	5	10.0
Herbicide application	50	100.0
Total	119	
Harvesting practices		
Manually	50	100.0
Using mechanized/automated equipment	0	0
Total	50	100.0

The results imply that those who were married formed the largest proportion than those who were singled or widowed. This result is in consonance with the study of Baba *et al.* (2010), who found that married farmers participated more in vegetable farming to support their families. The result confirms the study of Welch (1970) that highly educated workers tend to adopt new technologies faster than those with less education. Moreover, the socio-economic characteristics of the vegetable grower respondents reveal a dedicated and primarily self-sufficient agricultural community. While there is a strong commitment to farming, there are opportunities for improvement in areas such as crop

insurance uptake and access to social welfare programs. The data also highlights the importance of experience and land tenure in shaping agricultural practices and economic stability within this group.

The table 3 presents the agricultural activities and services received by respondents provides a comprehensive overview of the resources, practices, and knowledge utilized by vegetable growers. The primary sources of agricultural information for respondents are barangay officials and municipal agriculturists, each cited by 58% of respondents. This indicates a reliance on local governance structures for agricultural support. Other sources include

Department of Agriculture (46%), TV/Radio/social media (30%), and private enterprises (20%). The low engagement with NGOs, associations, or cooperatives (12%) suggests potential areas for increased outreach and support. A significant majority of respondents receive seeds (90%) and fertilizers (90%), which are

essential inputs for vegetable farming. However, services such as biological control agents (16%) and construction of farm production facilities (24%) are less frequently accessed, indicating a potential gap in integrated pest management and infrastructure development.

Table 4. Marketing, Sources of financing for vegetable production, Savings, Investments and Problems Encountered.

Marketing, Sources of Financing for Vegetable Production, Savings, and Investments, and Problems Encountered	Frequency	Percent
Marketing Practices		
Market	28	56.0
Intermediary (Middle man/woman)	33	66.0
Community	11	22.0
Total	72	
Production Cost in one cropping cycle per hectare		
₱10,000.00 and below	30	60.0
₱10,001.00 to ₱20,000.00	12	24.0
₱20,001.00 to ₱30,000.00	6	12.0
₱30,001.00 to ₱40,000.00	1	2.0
₱40,001.00 to ₱50,000.00	1	2.0
Total	50	100.0
Mean	14,170.00	
SD	11,095.88	
Income (Php) in one cropping cycle per hectare		
₱10,000.00 and below	13	26.0
₱10,001.00 to ₱20,000.00	13	26.0
₱20,001.00 to ₱30,000.00	15	30.0
₱30,001.00 to ₱40,000.00	5	10.0
₱40,001.00 to ₱50,000.00	4	8.0
₱50,001.00 to ₱60,000.00	0	0
₱60,001.00 to ₱70,000.00	0	0
₱70,001.00 to ₱80,000.00	0	0
₱80,000.00 and above	0	0
Total	50	100.0
Mean	23,092.00	
SD	12,969.30	
Price setting practices (*multiple response)		
Word-of-Mouth	19	38.0
Based on Cooperative/Association Pricing	10	20.0
Set by the trader/buyer	41	82.0
Farm Gate Price	0	0

Prevailing Market Price/Farm Gate Price	15	30.0
Total	85	
Product Transport Practices		
Respondents as to whether they transport Products		
Yes	13	26.0
No	37	74.0
Total	50	100.0
Transportation used		
Animals (carabao, horses)	0	0
Tractors, <i>kuliglig</i> , and other mechanized equipment	13	100.0
Total	13	100.0
Respondents' sufficiency of capital for farm operation		
Yes	37	74.0
No	13	26.0
Total	50	100.0
Savings as source of capital		
Yes	27	46.0
No	23	54.0
Total	50	100.0
Causes of Damage(*Multiple Response).		
Flood	48	96.0
Typhoon	36	72.0
Pest/Pestilence	22	44.0
Lack of Financial Resources for Operation	4	8.0
Drought	1	2.0
Lack of water source	8	16.0
Total	119	
Effects of Damaging Causes to Production		
Low yield/harvest	27	54.0
No yield/harvest	23	46.0
Total	50	100.0

The low uptake of technology demonstrations (6%) and small-scale irrigation projects (4%) suggests limited exposure to innovative agricultural practices. Approximately 52% of respondents have availed themselves of training, while 48% have not. This indicates a relatively balanced distribution, but it also highlights the need for more training opportunities to enhance agricultural skills and knowledge. Majority of respondents (68%) obtain their planting materials from vendors or suppliers, while 46% source from the Department of Agriculture. A smaller percentage rely on their own supply (36%) or other government

sources. This reliance on external suppliers may affect the sustainability and cost-effectiveness of their farming practices. The respondents predominantly grow hybrid varieties (52%), with 42% growing both hybrid and open-pollinated varieties. This preference for hybrid seeds may be driven by their higher yield potential, although it may also raise concerns about seed dependency and biodiversity. Many farms are rainfed lowland (52%), followed by irrigated farms (44%). This distribution indicates a vulnerability to climate variability, particularly for those relying solely on rainfed systems. A significant majority (95.5%) of

respondents rely on private individuals or groups for irrigation, indicating a lack of access to formal irrigation systems provided by the National Irrigation Administration. The use of traditional farm animals (90%) and garden tools (64%) is prevalent, while mechanized machinery is less common (30%). This suggests a reliance on labor-intensive practices, which may limit productivity. While 60% of respondents are aware of GAP, only 33.3% practice them. This discrepancy highlights the need for more effective training and resources to encourage the adoption of sustainable agricultural practices.

A majority of respondents (62%) use both organic and inorganic fertilizers, while 48% use commercial/synthetic pesticides. The reliance on synthetic inputs raises concerns about environmental sustainability and health impacts. The primary source of guidance for fertilizer and pesticide use is personal experience (60%) and directions on packaging (74%). This reliance on informal knowledge may limit the effectiveness of their practices and highlights the need for more technical support. Hand-held sprayers are the most used tools for applying fertilizers and pesticides (84%), with a small percentage using mechanized sprayers (32%). This suggests a potential area for investment in more efficient application technologies. Manual weeding is the predominant practice (94%), and all respondents harvest manually. This labor-intensive approach may affect overall efficiency and productivity.

This result reveals a community of vegetable growers that relies heavily on local resources and traditional practices. While there is a strong foundation in terms of access to seeds and fertilizers, there are notable gaps in the adoption of innovative practices, training opportunities, and the use of technology. Addressing these gaps could enhance productivity, sustainability, and resilience in the agricultural sector. The table 4 shows the marketing practices, sources of financing for vegetable production, savings and investments, and problems encountered by vegetable growers provides a comprehensive overview of the economic landscape faced by these farmers. Most respondents

sell their produce through intermediaries (66%), while 56% sell directly to markets, and 22% sell within their community. This reliance on intermediaries may indicate a lack of direct market access, which can affect profit margins and pricing for the growers. A significant portion of respondents (60%) report production costs of ₱10,000.00 and below per hectare, with a mean cost of ₱14,170.00 and a standard deviation of ₱11,095.88. This suggests that many growers operate on a relatively low-cost basis, which may limit their ability to invest in improvements or expansions. Income from vegetable production shows a more varied distribution, with 30% of respondents earning between ₱20,001.00 to ₱30,000.00 per hectare. The mean income is ₱23,092.00, indicating that while some growers are achieving reasonable returns, many are still earning below sustainable levels, particularly given the production costs. Price setting is predominantly influenced by traders/buyers (82%), with word-of-mouth (38%) and prevailing market prices (30%) also playing roles. The heavy reliance on traders for pricing may limit growers' negotiating power and could lead to lower profit margins. Only 26% of respondents transport their products, with all of those using mechanized equipment such as tractors.

The lack of transportation options may hinder market access and limit the ability to reach broader markets. A majority (74%) of respondents feel they have sufficient capital for farm operations, which is a positive indicator of financial stability. However, 46% rely on savings as a source of capital, suggesting that many may not have access to formal credit or financing options. The most significant threats to production are floods (96%) and typhoons (72%), indicating a high vulnerability to climate-related events. Pests and pestilence also pose a challenge (44%), while financial constraints and drought are less frequently cited as issues. The effects of these damaging causes are significant, with 54% of respondents reporting low yields and 46% experiencing no yield at all. This highlights the critical impact of environmental factors on agricultural productivity and the need for better risk management strategies.

The data reveals a community of vegetable growers who face significant challenges in marketing, production costs, and environmental risks. While there is a sense of capital sufficiency among many respondents, the reliance on intermediaries for sales and the vulnerability to climate-related damage are concerning. The findings suggest a need for improved market access, better pricing strategies, and enhanced support for risk management to bolster the sustainability and profitability of vegetable production in this community. Addressing these issues could lead to more resilient agricultural practices and improved economic outcomes for the growers.

Conclusions and Recommendations

The socio-demographic profile of vegetable grower respondents reveals a predominantly male, middle-aged, married population with a strong cultural identity and significant organizational involvement. The socio-economic characteristics of the vegetable grower respondents reveal a dedicated and primarily self-sufficient agricultural community. Result also reveals that a community of vegetable growers that relies heavily on local resources and traditional practices. The community of vegetable growers who face significant challenges in marketing, production costs, and environmental risks. While there is a sense of capital sufficiency among many respondents, the reliance on intermediaries for sales

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